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signal sequence

GON-1  
ADAMTS-1  
PINP  
MRSIGGFHLLQPVVAA...VVCLVVALOSG...TISEFSSDVLFSRAKYSVGVPHHSRURQDAGI...IDSHHIVRRDSYGRGR...DVISTDORRRRLQGVARDCCGHACHLR...RSDDAVY 119  
MGDVQRAARSRGSLSAHML...IASITMLLCARGA...HGRTEEDEEL...PSLERAPGH...DSITT...RLRLDAF...GOOLHLKLPDPSG.F 83  
MDPPAGAGRL.LCPAL...LPADARLAA...AADPPGGPQGHGAERILAVPVRTDAOGRLVSHV...SAATAPAGVR...RRAAPAQIPGLSGGSEEDPGGR...FYNVTVFGRDLHLR...RP.NARL 122

GON-1  
ADAMTS-1  
PINP  
EVHLHRWNIQIPDSHNKSVPHFSNSNFAPMVLV...DSEEVVGGMSRTDPC...IYRAHVKGVHSHSTVNLCDSEGLYGLML...ALPSGIHTVEPIISGNGETH...DGASRHRQHLVRKFDPMHFKSFDHL 242  
UAPGFTLQTVGRSPGSEAQHLDPTGDLAHCFYSGTVNGDPGSA...ALSCEGVGAFYLOGEEFFQAPGVATERLAPAVEESSARQPHILRRRRGSGGAKCG.VMDD...ETLPTSRSRPE 205  
VAPGATVEWQGESGATRVEPL...LGCLVGDVAGLAESSVALSNCGLAGLIRNEEEFFLEPL...EKLAKAEAEQGRVHVYHRTTSPPLGGPQAL...DTGISADSLDS 232

GON-1  
ADAMTS-1  
PINP  
NSTSVNETETTATWQDQWEDVIERKASRRRAANSNDHYNEVAVADTKMVEYHGRS...EDVYTLFSTVASINRHQSIRAS...NVVVKLIVKKTENAGPRI...TQMAQQ...LODFCRQQYYNDP 364  
SONTRNQWVROPTPQDAGKPSGPGSIRKRFVSS.PRYVETMLVADQSMADFHGSG.LKHVLTILF SVAA...FVCHPSIRNS...ISLVVVKILVIVYEEOKGPEV.TSMAAL...URNFCSMOKOHNSP 326  
LSRALGVLE...ERVNSSRR...RRHAADDYNI...EVLEGVDDSVVOEHGTEHYOKYL...LTLMNIYNEIYHDESLGAI...NVVLVRLIL...SYGKSMSL...EIGNPSQS...LENVGRWAYLQQKP 346

GON-1  
ADAMTS-1  
PINP  
DDSSVQHHDVAILLTR...QICRSQKCDTL...LAEGTGMQMSQATIEDNG...SAAFTTIAHE...GHVFS...PHDDERKCTYMPVKNKNF...MAP...TIEYNT...PWSMS...CSAGM...ERF...LENNRGQTQC 488  
SDRQPEHYDTAILFTRDLCGSH.TCDTLGADYGVTCVDPSPSSVIEDDG...QAAFTTIAHE...GHVFN...PHDDAKHCASLNGVSGDS.H...WASMS...SLDHSQPS...CSAYMT...SELDNGHG...EC 446  
DTHDDEYHDAIFLITRODF...GPSGMO...YAP...VTGMCHPVRSCTINHEDE...SSAFVVAHE...TGHVLGMEHDGO...GNRCGEVRLGSI...MAP...VQAAF...HRFHWSRCSQ...QEE...SRYLHS...YDC 459

GON-1  
ADAMTS-1  
PINP  
LFQDPVERRYEDVVRDEPGKKYDAHQCKFVFG...ASELCP...YMP...TCRLWCATFYGSQMGRT...QHMP...WADGTP...CDES...SMFCHGACVRLA...PESLTKIDG...QMG...WRS...MGES...CRTGGG 607  
LMOKPON...PIKLP...SDLP...GLYDAN...CQCFTEG...ESKHC...PDAAS...TCITLWCTGTSGLLV...CQCKHF...WADGTS...GGEK...WCVSGK...GVNKTDMKHFA...TPVHSG...MGP...MGPMGDC...SRTCGGG 562  
LRDDPETHDWA...LPQLPGLHYSMNEQCREDEG...GYMCTAFRTFDPCQLWCSDHNPYF...CKTKKG...PLDGTMCAPGKH...CFKCH...IWLTP...DILKRD...G...WGA...SPFG...SRTCGTG 574

GON-1  
ADAMTS-1  
PINP  
VQKGLRD...CDSPK...RNGGKY...GVQORERYSCNTQEC...NDT...QPVREVOCSEFNKNDIGIQGVASTNTH...WPKYANVAPNE...RQ...LYRLSGS...AAFYLRDKV...VDGT...CD...RNGDDI...CVAGAC...MPAG 729  
VOYTHRECDNPVP...NGGKY...GEGKRV...RASCNIEDCPDNGKT...FREEOCEAHNEFSKASFGNEPT...VEMTPKYAGVSPKDR...QLTCEAKIGYFFV...EOPKV...VDGTP...CS...PDSTS...VCV...G...G...V...KAG 684  
VKFTRQCDNPHDANGGRITCSGLAYD...QLCNSQDCE...DALAD...REE...OCROWDLY...FEHGDAQH...LP...HEHRDAKE...RG...HLYCESKETGEVVS...MKRMV...DGT...RC...SYKDAF...SL...CVRG...D...CRKVG 692

GON-1  
ADAMTS-1  
PINP  
CDHQHSTLRRDKCGVCGGD...SSCKVVKGTFN.EQGTFGYNE...WKIPAGSAN...D...TRQKGYNNMKEDDNYLSLRAANGE...ELNGHFQVSLARQIQAFQDTVLE...VSGSD...I...E...R...INGT...G...IRSD...Y 852  
CDRIEDSKKKFDKCGVCGGGS...TCKK...SGIVT...STRP.GYHD...VTIPAGATNIEVKHRNQRSGRNGSFLATRAADGT...VALNGNFT...STLEQDLTYKGTVLRYSGSS...AAL...R...RSFS...P...KEP...IT 806  
CDBV...GSSKQEDKCGVCGGD...SHCKVVA...GTFSRSPKKLGYIKNFEIPAGARH...L...IQEAD...TSSHHLAVKNLETGK...FEL...NEEND...DPNSKTFIANGVENE...Y...DEDEGR...ET...EOTMGP...HGT...TUT 811

GON-1  
ADAMTS-1  
PINP  
VHV...SVG...SHPPD...SY...EYMTAAVPNAVIRPISS...AL.YLNRVTD...TITE...D...RAC...R...G...Q...S...Q...K...L...M...D...M...ST...R...Q...SHDRNGONV...L...K...P...K...O...A...T...R...M...ONI.DCS.TRMIT...EDVSS...CSAKCGS...GOKRQ 966  
IQV...M...W...G...H...A...L...R...P...K...E...T...Y...FMKKKTESF...NAI...PTFSEM.VIEMGE...CSKT...CGSG...M...ORRV...Q...ORDINGHPAS...EQAKEVKPA...STRP...CADLPG...PH...QVGDWSP...CSKT...CGK...GYKKR 915  
VLVIPEGDA.RIS...TYKYMIHEDSLNVDNNVLEDSDSVGYEM...ALKKUSP...SK...PCGGG...SQ...TKYG...RRRLD...K...M...VHRG...F...EDSVSKP...AIRRT...QNP...EQCSQPV...VTG...EWEP...CSR...SGRTG...MQVR 932

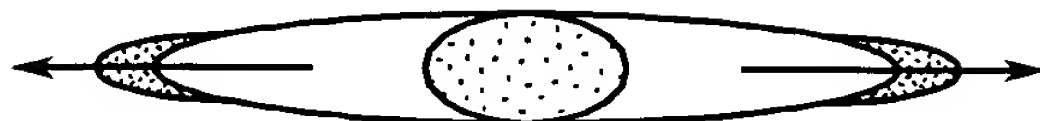
GON-1  
ADAMTS-1  
PINP  
RUSGVKMEGDROT.PASEHLQDRNSK...PSD.IASCVI.DG plus 1148 amino acids  
TLKCVSHDGG...VLSNES...DPL...KK...KH...YID...F...TLTQC plus 1 amino acid  
SVRCVQPLHNNTTRSVHTKH...N.DAR...BEGR.RAONREL plus 236 amino acids

FIG. 1C

FIG. 2A

A. WILD-TYPE GONADOGENESIS

L1-L3



L4

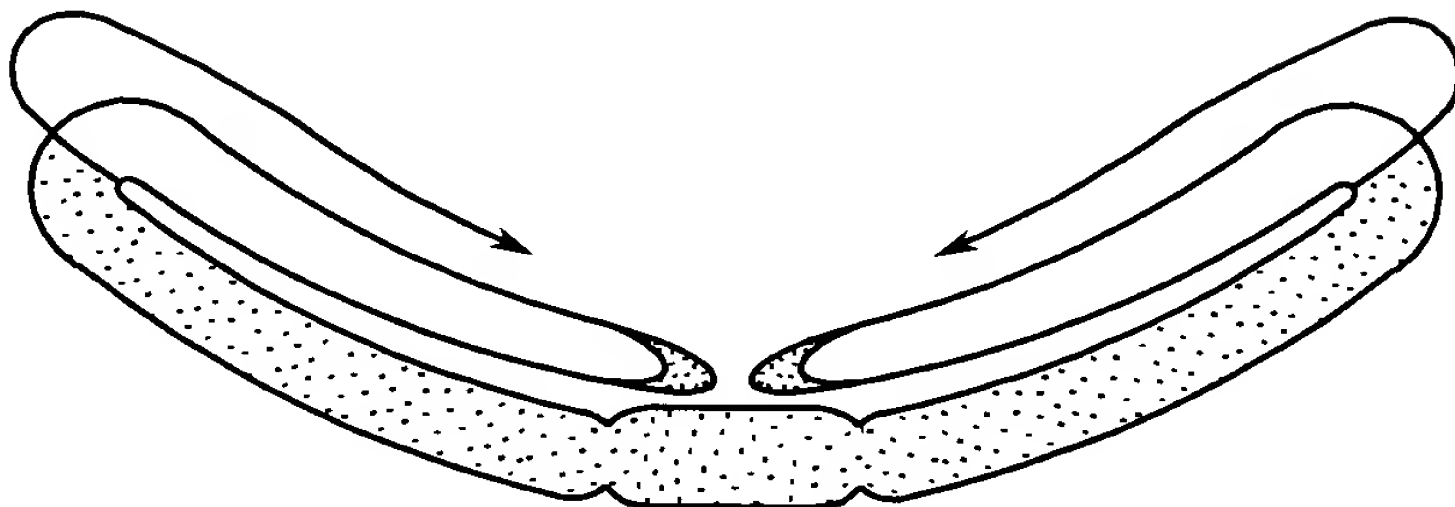
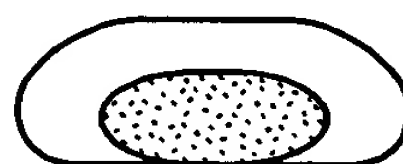


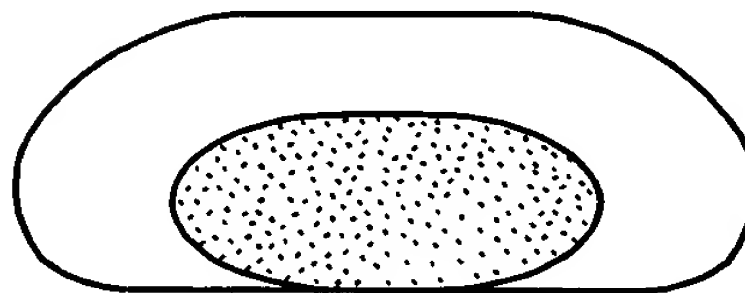
FIG. 2B

B. *gon-1* REQUIRED FOR GONAD MORPHOGENESIS

L3



L4



KEY:  SOMATIC GONAD  GERM LINE  DTC